04/25/2000 3900.19B

CHAPTER 25. FAA PERSONAL PROTECTIVE EQUIPMENT

- **2500. GENERAL.** This chapter establishes minimum requirements for the selection, use and maintenance of personal protective equipment (PPE) by FAA employees. Engineering controls are the preferred course to address any exposure; however, PPE shall be provided when engineering controls are not adequate or when it is necessary by reason of hazards of processes or environment. Examples of such hazards are chemical hazards, biological hazards, radiological hazards, physical hazards, mechanical irritants, or electrical hazards encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact. A significant component of this program is the requirement to assess all workplaces to determine if hazards are present, or likely to be present, which necessitate the use of PPE. This chapter includes requirements for compliance with the U.S. Department of Labor, Occupational Safety and Health Administration's (OSHA), Personal Protective Equipment Standard, 29 CFR 1910, Subpart I. The reader is advised to refer to this subpart for additional details as appropriate.
- **2501. GOALS AND OBJECTIVES.** The FAA shall ensure that all workplaces are surveyed for hazards and that, where required, appropriate PPE is provided to FAA employees to address those hazards.
- **2502. SCOPE.** This chapter applies to all FAA personnel. FAA contractors and subcontractors must comply with the minimum requirements of this program.

2503. KEY PROGRAM REQUIREMENTS.

- a. General Requirements.
- (1) **Hazard Assessment.** Technically Qualified Safety Personnel (for definition see Chapter 1, paragraph 11h) shall assess the workplace to:
- (a) Determine if hazards are present, or are likely to be present, which would require the use of PPE.
- **(b)** Determine what PPE would be appropriate based on the hazard and the capacity of the PPE to protect the employee from the hazard.
- (2) **Selection and Use of PPE.** If hazards are present, or likely to be present, employees shall use and care for assigned PPE in accordance with the training provided in paragraph 2503a(3)(a). In addition, immediate supervisors shall:
- (a) Based on the hazard assessment and recommendations of the Technically Qualified Safety Personnel, select and require each affected employee to use the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment.
- **(b)** Communicate selection decisions to each affected employee so that the employee understands the hazard or likely hazard, and why the particular PPE was chosen.
- (c) Ensure that any employee-owned PPE or PPE provided by the FAA is adequate to protect the employee and that it is properly used, tested, stored, and maintained.
- (d) Verify that the required workplace hazard assessment was performed and documented by a certificate that identifies the workplace evaluated; the person certifying with a signature that the evaluation was performed; and the date(s) of the hazard assessment.
- (e) Verify that each affected employee assigned PPE has been properly trained in accordance with subparagraph 2503a(3) below, prior to using PPE.

Chap 25 Page 1

3900.19B 04/25/2000

(f) Immediately dispose of all defective, damaged, inappropriate, or noncompliant PPE in accordance with this chapter, applicable OSHA regulations and guidance, and the manufacturer's instructions.

(3) Training.

- (a) The FAA manager shall ensure that the employee's immediate supervisor provides training to each FAA employee who is required by this chapter to use PPE. Each employee shall be trained to know when PPE is necessary; what PPE is necessary; how to properly wear and adjust PPE; the limitations of PPE; and the proper care, maintenance, useful life, and disposal of the PPE.
- **(b)** After the training is completed, each employee shall demonstrate to the satisfaction of the immediate supervisor an understanding of the training specified above, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.
- (c) When there is reason to believe that any employee who has received PPE training does not have the understanding and skill required by paragraph (3)(a) above, the supervisor must see that each such employee is retrained until he or she does have the understanding and skill required.
- (d) Circumstances where retraining is required include situations where changes in the workplace, work tasks, or in the type of PPE to be used, render previous training obsolete.
- (e) The FAA shall verify that each affected employee has received and understood the required training, which shall be documented by a written certificate, signed by the employee, that contains the name of the employee trained; the date(s) of training; and the subject of the training.

(4) Payment for Protective Equipment.

- (a) All protective equipment required by this chapter shall be provided at no cost to employees. Exception: The FAA is not required to pay for safety-toe protective footwear, or for prescription safety eyewear, provided that all three of the following are met:
 - (i) The footwear and eyewear are permitted to be worn offsite.
- (ii) The footwear or eyewear is not used at work in a manner that would make it hazardous for use off the job, e.g., contaminated by chemicals which could be tracked into the home.
 - (iii) The footwear or eyewear is not designed for special use on the job.
- **(b)** Current bargaining unit agreements in regard to personal protective equipment will be honored.

b. Requirements for Eye and Face Protection

- (1) FAA supervisors shall require that each affected employee uses eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially injurious light radiation, or biohazardous materials (e.g., blood or other bodily fluids) which may be transferred by splashing or aerosolization or as dried particulate matter. Refer to ANSI Z87.1, American National Standard for Occupational and Educational Eye and Face Protection, for additional requirements.
- (2) FAA supervisors shall require that each affected employee uses eye protection that provides side protection when there is a hazard from flying objects. Detachable side protection (e.g., clip-on or slide-on side shields) are no longer acceptable.

Page 2 Chap 25

04/25/2000 3900.19B

(3) FAA supervisors shall require that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards wears eye protection that incorporates the prescription in its design. Eye protection such as safety goggles that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses is allowed.

- (4) FAA supervisors shall require that each affected employee uses eye and face protective equipment for protection from injurious light radiation, with filter lenses that have a shade number appropriate for the work being performed.
 - (5) Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.
- (6) Areas in which eye/face protection is required (e.g., battery rooms, soldering stations) be posted with signs which read: "DANGER: EYE AND FACE PROTECTION REQUIRED."
- (7) Unvented or indirectly vented chemical splash goggles and face shields are to be used whenever there is a hazard from liquid chemical splashes.
- (8) Eye and face protective equipment shall be maintained in a clean condition and stored in such a manner that it does not become contaminated or dirty.

c. Requirements for Head Protection

- (1) FAA supervisors shall require that each affected employee wears a protective helmet (hard hat) when working in areas where there is a potential for injury to the head from falling objects or other overhead hazards in accordance with 29 CFR 1910.135 and ANSI 89.1, American National Standard for Personnel Assurance Protection-Protective Headwear for Industrial Workers-Requirements.
- (2) FAA supervisors shall require that each such affected employee wears a protective helmet designed to reduce electrical shock hazard when near exposed electrical conductors that could contact the head.
- (3) Areas in which protective helmets are required shall be posted with signs that read: "DANGER: HARD HAT AREA."
- **d.** Requirements for Protective Footwear. FAA supervisors shall require that each affected employee uses protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or where such employee's feet are exposed to electrical hazards. Footwear shall comply with 29 CFR 1910.136 and ANSI Z41, American National Standard for Personal Protection-Protective Footwear.

e. Requirements for Hand Protection.

- (1) FAA supervisors shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; vibration; or harmful temperature extremes.
- (2) FAA supervisors shall base selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the tasks(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.
- **f.** Requirements for Electrical Protective Devices. Requirements for electrical protective devices are generally more technical and specific than those for other PPE. Please refer to 29 CFR 1910.137 for more detailed requirements.

Chap 25 Page 3

3900.19B 04/25/2000

(1) **Design Requirements.** Insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber shall meet the following design requirements:

(a) Manufacture and Marking.

- (i) Blankets, gloves, and sleeves shall be produced by a seamless process.
- (ii) Each electrical protective device shall be clearly marked as to the appropriate class or type.
- (iii) Other relevant markings, such as the manufacturer's identification and the size of the equipment may also be provided.
- (iv) Markings shall be nonconducting and shall be applied in such a manner as not to impair the insulating qualities of the equipment.
 - (v) Markings on gloves shall be confined to the cuff portion of the glove.

(b) Electrical Requirements.

- (i) Electrical protective equipment shall be capable of withstanding the a-c proof-test voltage or the d-c proof-test voltage specified by OSHA in 29 CFR 1910.137(a)(2)(i ii).
- (ii) Equipment that has been subjected to a minimum breakdown voltage test may not be used for electrical protection.
- (iii) Material used for Type II insulating equipment shall be capable of withstanding an ozone test, without visible effects. The ozone test shall reliably indicate that the material will resist ozone exposure in actual use. Any visible signs of ozone deterioration of the material, such as checking, cracking, breaks, or pitting, is evidence of failure to meet the requirements for ozone-resistant material.

(c) Workmanship and Finish.

- (i) Electrical protective equipment shall be free of harmful physical irregularities that can be detected by the required tests or inspections.
- (ii) Surface irregularities that may be present on all rubber goods because of imperfections on forms or molds or because of inherent difficulties in the manufacturing process and that may appear as indentations, protuberance, or imbedded foreign material are acceptable if the indentation or protuberance blends into a smooth slope when the material is stretched, or if foreign material remains in place when the insulating material is folded and stretches with the insulating material surrounding it.
- (2) In-Service Care and Use. All protective equipment required by this chapter shall meet the following criteria:
 - (a) Electrical protective equipment shall be maintained in a safe, reliable condition.
- **(b)** All electrical protective equipment shall be used, stored, maintained, periodically inspected, repaired, replaced and tested in accordance with the manufacturer's instructions and applicable OSHA requirements and guidance.
- (c) FAA supervisors shall either certify that equipment has been tested as required in paragraph 2503f(2)(b) or obtain such certificates from the manufacturer of the safety equipment. The certificate shall identify

Page 4 Chap 25

04/25/2000 3900.19B

the equipment that passed the test and the date it was tested. *Note*: Marking of equipment or entering the results of the tests and the dates of testing onto logs are two acceptable means of meeting this requirement.

g. Other Requirements for Protective Equipment. Specific requirements for respiratory protection, hearing protection, and protective clothing for exposure to blood and body fluids are covered in other chapters of this Order.

Chap 25 Page 5